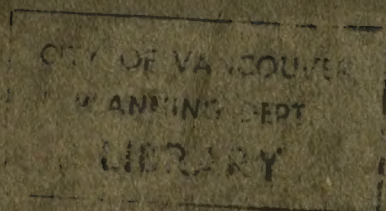


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PD 1196

PROPOSED SPANISH BANK PORT TERMINAL



POINT GREY
TOWN PLANNING COMMISSION
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REPORT ON THE
PROPOSED SPANISH BANK HARBOUR PROJECT

To The

POINT GREY TOWN PLANNING COMMISSION

12th June, 1928

DESCRIPTION

The proposed Spanish Bank Harbour Development has for its purpose the reclamation of some seven hundred (700) acres of land along Spanish Bank of English Bay from a point about even with Alma Road to and somewhat beyond Point Grey, the entire distance being about five (5) miles. (See Plan No. 82, date, 28th February, 1912, scale one inch equals 12 chains, Vancouver Terminals Company)

The project has for its purpose the creation of dockage for general shipping and land for industries. The Harbour would be artificially created by dredging a deep inner channel and basin, the material from which would be then thrown seaward and shoreward to form a break water and land for industries and docks. According to the

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sketch plan submitted, there would be created about one hundred and fifty (150) acres of dockage and wharfage and five hundred and sixty (560) acres of land available for industrial purposes.

An essential part of the project is the construction of terminal railroad tracks, apparently some twenty (20) or thirty (30) miles in length and involving about four (4) miles of tunnel construction. According to the plan the railroad tracks thus provided, terminate at the Government Bridge at New Westminster. One loop of the terminal track extends northerly across the Point Grey district from a point about one mile west of Marpole and then northwesterly to the easterly end of the harbour development along English Bay. The other loop of the track follows the North Arm of the Fraser River around Point Grey thus completely encircling this territory with railroad tracks.

COST OF PROJECT

No definite figures have been made available as to the cost of such a project in its entirety, but it has been indicated that the total cost will approximate \$75,000,000.00

ADVANTAGES CLAIMED FOR PROPOSED PROJECT

The project apparently was conceived through a desire to create additional harbour and industrial facilities for the Vancouver district. Some of the advantages claimed for the Spanish Bank Harbour are as follows:-

1. Its Easy Accessibility by Land and Water.

There is no question but that the proposed harbour site can be made accessible by land through the construction of adequate highways and rail roads. It is, of course, about as far from the present land routes of travel as it could well be.

COST OF PROJECT

No definite figures have been made available as to the cost of such a project, in its entirety, but it has been indicated that the total cost will approximate \$25,000,000.00

ADVANTAGE CLAIMED FOR PROPOSED PROJECT

The project apparently was conceived through a desire to create a harbor and inland waterway system. Some of the advantages claimed for the project are as follows:-

1. Its great accessibility by land and water.

There is no question but that the proposed harbor site can be made accessible by land through the construction of adequate highways and rail roads. It is, of course, some distance from the present land routes of travel as it could well be.

2. It is of large area.

It is conceivable that a harbour, constructed in this location, could be made easily accessible by water, but in its present form as proposed, it is hardly as easy of entrance as the present Burrard Inlet. It will be noted from the drawing accompanying the promoters' description of the project that vessels entering and leaving the inner harbour would be compelled to make a complete turn before standing clear for entrance to the harbour or to the straits. The entrance channel as drawn, is only about six hundred (600) feet wide, which is considerably less than one half of the width that can be obtained at the First Narrows. There will doubtless be less current to contend with in entering the inner harbour, but even this advantage would not be obtained unless there were adequate opening at the westerly end of the harbour to equalize the tidal flow.

compact form of industrial development that may be

It is conceivable that a harbor, con-

structed in this location, could be made easily accessible by water, but in its present form as proposed, it is hardly as easy of entrance as the present barrier inlet. It will be noted from the drawing accompanying the promoter's description of the project that vessels entering and leaving the inner harbor would be compelled to make a complete turn before standing clear for entrance to the harbor or to the straits. The entrance channel as shown, is only about six hundred (600) feet wide, which is considerably less than one half of the width that can be obtained at the first narrows. There will doubtless be less current to contend with in entering the inner harbor, but even this advantage would not be obtained unless there were adequate opening at the westerly end of the harbor to equalize the tidal flow.

2. It is of large area.

In the Harbor Report prepared for the Town Planning Commission of Vancouver, attention is called to the large amount of area still available for industrial and business purposes, both on the north and south shores of Burrard Inlet (See Harbor Report, page 19). On the north shore alone there are approximately 10,000 (10,000) acres yet to be developed and on the south shore approximately 2,000 (2,000) acres of land.

The rehabilitation of the False Creek district will provide an additional 1,000 (1,000) acres of industrial land. In this connection it is only a question of time when the new steel and metal industries, both in the False Creek district and the Burrard Inlet will be compelled to move to a new location on account of increasing land values and difficulty of maintaining continuous operations. This will release a further large area for the use of the city for industrial development that may be

expected. It is entirely probable that sufficient industrial area and water frontage is available on Burrard Inlet and tributary waters and along False Creek to provide for the needs of Vancouver proper during the next fifty (50) years. So far as Greater Vancouver is concerned there are tremendous areas of flat land along the Fraser River which can, at comparatively small expense, be made suitable for both industrial and harbour development. Lulu Island alone contains some twenty-five thousand (25,000) acres, most of which can be used for industries of a certain description, requiring large tracts and not too heavy foundations. There is no indication at the present time that even this area will require intensive development for either industries or storage in the immediate future. For this it appears illogical to create an additional comparatively small acreage at so tremendous a cost.

3. Shipping Can Get to and From it at Any State of Tide or in any Class of Weather, Foggy or Clear.

Attention has been previously directed to the turn around movement required for all ships entering and leaving the Harbour, if arranged according to the proposed plan.

4. It will be Closer to and more intimately Connected with the main Centre of future Population than is possible at any other Waterfront.

Any advantage that may be claimed for closer association with population centres and water front and industrial areas clearly lies with those lands in the vicinity of Burrard Inlet and the False Creek district and around New Westminster. This is obvious from a study of the trend of population and the topography of the City.

5. The Cost of Construction
Will be Small.

As there are no estimates available at the present time it is difficult to comment upon this statement. However, it should be apparent that any project costing \$75,000,000.00 is of major importance. A casual observation of the district and the plans submitted indicates that the construction cost will be extremely large, involving as it does a very great quantity of fill, several miles of bulk heading and extensive railroad and highway construction, together with all the appurtenances such as are now in use in Burrard Inlet, only on a much greater scale.

6. Administration Costs
Will be Light.

No figures are available to show what the administration cost would be but it seems apparent that the cost of maintaining the channel alone would be comparatively high as it is reasonable to suppose that the deposition

of materials which formed Spanish Bank will continue, necessitating more or less constant dredging to keep the artificial channels open.

7. The efficiency of the Complete Undertaking will be high because it will be the most modern work of its kind in existence.

This is a very broad statement of a claim impossible to verify or substantiate by detailed figures and estimates. It may be said, however, that the operation of a harbour and industrial district in such a locality will be greatly handicapped by the great distance (ten (10) to twenty (20) miles) from the main classification yards of the railroads. This necessitates an unusually long terminal haul, which is necessarily costly. The proposed plan compares most unfavourably with the present method of handling shipping by rail to and from the industrial and harbour districts about Burrard Inlet, the False Creek area

and New Westminster district. The terminal operations here are compact, flexible and with some improvements can be made almost ideal.

8. Effect upon Point Grey Residential District.

It is argued that the terminal improvements will be at the water level, therefore, will not unfavourably affect the residential section in this locality which is situated at a considerable height and at some distance away from the water front. It is apparent that the operation of industries on an extensive scale would be highly injurious to any district, business, residential or educational, when in such close proximity. Winds off the straits would carry the smoke, noise and odours from such a district directly over the Inland and most likely create a pall of smoke over the entire Bay, thereby increasing the formation of fog. Railroad operations alone would be sufficient to affect adversely the property in the vicinity. The

pollution of all bathing beaches bordering English Bay and the absolute destruction of some of them would be inevitable. Greater Vancouver would lose some of its most attractive features, notably Marine Drive and the recreational facilities in and around English Bay.

CONCLUSIONS

In order to make such a scheme effective an enormous initial expenditure would be necessary for the construction of break waters and provision of railroad and highway connections, without which even the most primitive sort of harbour work would be futile and wasted. The total investment in such a project would be stupendous indeed, probably as much as \$75,000,000.00. For this sum, if the plan submitted is correct, six hundred and eighty (680) acres of land would be created (one hundred and fifty (150) acres of dockage and wharf) and some four hundred and thirty (430) acres for

presumably industrial development at a cost per acre of about \$111,000.00. This is many times more than the cost of equivalent or better placed land on Burrard Inlet. Obviously as long as land is available elsewhere at less cost there would be little demand for that which could be reclaimed through this proposed Spanish Bank project.

While no one can forecast the ultimate requirements of Vancouver District or the Province it would be most unwise to spend money in anticipation of needs such beyond that which one can possibly foresee. For example, it has been demonstrated that much of the total available waterfrontage of Burrard Inlet remains to be developed, and that it may require fifty (50) years to utilize fully this area alone. In addition, there are other locations at hand only slightly less favoured than the Burrard Inlet lands, which can be made available at a comparatively small cost.

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Until Burrard Inlet is fully utilized and other frontage now possessing good accessibility has been developed, it does not seem business like to go to the extraordinary expense of liberally creating new land particularly in a location possessing so few natural advantages. An equivalent sum spent on Burrard Inlet, Fraser River and other waters now in actual use for navigation and industrial purposes would reflect much greater benefit than if dissipated upon a project of even doubtful ultimate necessity.

A most important consideration is the practical certainty of badly handicapping, if not altogether preventing further improvement of our present harbour facilities by the diversion of so huge a sum of money to a project altogether beyond the times.

Attention is called to the industrial housing problem that would be created should such a project as this actually materialize. It is an invariable rule that dwellings, tenements, lodging houses of an appropriate type will group themselves in close proximity to major industries, for it is necessary that the mass of workers be within easy walking or riding distance of the place of employment. This applies especially to those trades having to do with shipping and water front activities generally.

There is at present no available residence district within five (5) miles of Spanish Bank which could be economically devoted to the type of housing required. The natural tendency would be a sporadic development of small groups of houses, necessarily out of harmony with the prevailing class of homes for which the Point Grey district is justly famous. Ordinarily for enterprises of such magnitude, the housing problem receives first consideration.

It may be anticipated that such additional heavy vehicular traffic would be imposed upon the thoroughfares of Point Grey and contiguous areas. Such traffic is of a class for which the streets are not designed nor to which the residents are accustomed. The increase of vehicular movement in residential districts cannot improve it and its effects will assuredly be destructive of property values.

The Spanish Bank Harbour development project is apparently not founded upon a sound economic basis and as any attempt to carry it out would destroy about the last remaining beach accessible to the people, besides depreciating in value one of the finest residential and University sites on the coast, it is unhesitatingly recommended that this project be not encouraged as opposed to public interest.

Wm. D. Hudson.

CHAPTER III. HARBOUR AND
WATERFRONT DEVELOPMENT

PRESENT HARBOUR AND WATERFRONT DEVELOPMENT

Present Harbour and Waterfront Development of various kinds is confined to Burrard Inlet, False Creek, the North Arm of the Fraser and the Fraser River, as far east as Port Mann, and in these millions of dollars have already been invested.

WATERFRONT DEVELOPMENT WATERFRONT DEVELOPMENT

For the year 1927, tables "a" and "b" are submitted to show in detail the frontage used by various classes of owners. These tables indicate that on the south shore between Coal Harbour and the Second Narrows, but 27% of the water front remains undeveloped, while 67% of the water front on the North Shore is still undeveloped.

TABLE "A"

PRESENT USE OF BURNING INLET
SOUTH SIDE YEAR 1927

Between Coal Harbour Drawway and Second Narrows

Length of Waterfrontage 30,500 feet - 5.8 miles

Canadian Pacific Railway Company	8,500 feet	22%
Vancouver Harbour Commission	3,750 feet	12%

Remaining Shipping Interests

Union Steamship Co.	200 feet	
Evans, Coleman & Evans	400 "	
North Vancouver Ferry	200 "	
Canadian National Railway	300 "	
Great Northern Railway	500 "	
Terminal Dock Company	2,400 "	
Columbia Elevator Co.	400 "	4,400 ft. 14%

Industries

Coal Harbour	1,650 feet	
Canadian Fishing Company	700 "	
Sugar Refinery	550 "	
F. Burns Co.	350 "	
Ross & Howard	250 "	
B.C. Marine Stores	300 "	3,800 ft. 12%

Wharves 3,250 ft. 11%

Undeveloped Water front 3,700 ft. 12%

TOTALS 30,500 100%

TABLE "B"

PRESENT USE OF BURRARD INLET
NORTH SHORE YEAR 1927

Between First and Second Narrows: Length of Waterfrontage

29,700 feet 5.8 Miles.

Vancouver Harbour Commissioners

Public Booming Ground	1,100 ft.		
Undeveloped Waterfront	<u>4,500 ft.</u>	5,600 ft.	19%

Sawmills		1,700 ft.	6%
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Industries

Creosoting Plant	500 ft.		
Northern Construction Co.	700 ft.		
Burrard Dock Co.	100 ft.		
Boatbuilders	<u>400 ft.</u>	2,400 ft.	8%

Undeveloped Waterfront		<u>20,000 ft.</u>	67%
		29,700 ft.	100%

A comparison of the present and potential wharfage of Vancouver Harbour shows:-

	<u>Present</u>	<u>Proposed</u>
Wharfage, North Shore	0.25 miles	7.13 miles
Wharfage, South Shore	<u>4.22 miles</u>	<u>3.96 miles</u>
	4.47 miles	11.11 miles

It will be noted that the North Shore offers opportunity for the establishment of numerous industries by reason of the large amount of flat areas immediately to the rear of the proposed harbour frontage. As pointed out in a previous report is the Vancouver Town Planning Commission:

"It is not anticipated that the entire potential wharfage and transshipment or industrial area will be required for possibly fifty years. The tonnage and other curves showing port business indicate that within that time approximately three times the volume of water-borne commerce will be passing through this port of entry. Existing facilities can absorb much of this as they are not now used to their full capacity, excepting possibly the elevators, however it is

urgently recommended that immediate steps be taken to insure the gradual carrying out of a programme that will have for its ultimate object the complete development for harbour purposes of the entire shore line of Burrard Inlet."

The above remarks deal entirely with that portion of the Burrard Inlet between the First and Second Narrows. It must be recognized that in the future, much of the shore line east of the Second Narrows Bridge will come in for harbour and industrial use.

FALSE CREEK LOCAL COASTWISE SHIPPING

According to the plans of the Vancouver Town Planning Commission, False Creek is to be retained as a "back door" Harbour. Plans of development have not been definitely worked out as the details are interwoven with street, transit and zoning requirements. The essential features of the plan, however, involve the filling in of large areas with a maintenance of a 20 foot channel of maximum width not exceeding 500 feet with turning basins and slips. Along the headline established by the Vancouver Harbour Commission there is at present a frontage of nearly four miles. With the filling in of a large part of False Creek this frontage might be somewhat reduced, but would depend on the number of slips provided.

The future False Creek area is expected to be a light industrial and warehouse area, served by scows, tugs and smaller vessels. The present logging concerns, it is considered, might have to move to a site such as the North Arm of the Fraser River. While the plan does not provide for deep sea vessels, it provides for a desirable segregation of shipping, so that local shipping need not interfere with deep sea harbours, thus increasing the potentialities of the later.

NORTH ARM FRASER RIVER COASTWISE SHIPPING

The North Arm of the Fraser River, according to Mr. C.C. Horsfold, District Engineer, Department of Public Works, has been dredged to ten feet at low tide and this can be maintained if dredges are available. At the present there is not sufficient water in the channel of the North Arm at two or three points for tugs to navigate until the tide has risen a few feet. There are many lumber mills established on the banks of the North Arm of the Fraser and as previously mentioned, it is expected that their numbers will be increased. While the logs are towed up the North Arm, the products are taken either by scows to Burrard Inlet or to New Westminster. B. C. Electric trackage is also immediately available being located along the North bank.

FRASER RIVER DEEP SEA VESSELS

Quoting again from Mr. Horsfold, it may be said that the greater part of the Fraser River, from Steveston to Port Mann, has a sufficient depth even at low tide for all ocean going vessels. At present there is throughout a minimum 20 foot draught at high tide. Dredging is being carried on to maintain a 30 foot draught with a 12 foot tide and this dredging can be carried out at a comparatively small cost as compared with the scheme of development at Spanish Bank. It is probably a very conservative estimate to say that the cost of dredging and maintaining the Fraser River would not begin to pay the annual charges for a development such as that proposed at Spanish Bank.

From Woodward's Landing easterly there are seven or eight miles of shore frontage available for wharfe on the north side and this can be served by a railway, the roadbed of the old Canadian Northern Railway still being in existence. Wharfe can also be found on the south shore of Annacis Island. Above New Westminster, both on the north and south shores there is considerable mileage that could be used for dockage.

The 1920 Annual Report of the New Westminster Harbour Commission shows the deep sea shipping that has been and is taking place. For the year 1920, this report shows that the number of deep sea vessels was 175. Over 25% of the total foreign deep sea exports of lumber for British Columbia

(exclusive of logs and bolts) in 1925, was shipped from the Fraser River. In 1925 the value of logs and exports was \$9,205,000.00. In addition to the above figures it should be noted that the New Westminster Harbour Commission is erecting a grain terminal on the south shore of the River near New Westminster, which will have a capacity of some 500,000 bushels, at an estimate of \$700,000. This will have direct connection with the Canadian National Railway and will be within the switching zone of the Canadian Pacific Railway, thus giving competitive railway rates.

The Pacific Coast Terminal Limited is an organization which, it is understood, commences on 1st July, the erection of a coal storage plant which, with terminals and other improvements, is estimated to cost \$2,170,000.00. Evidently the potential development of the Fraser River as an important terminal should not be over-looked.

A consideration of the opportunities for future development in the sites already dedicated by use and by investment as harbour sites, confirms the consultants in their belief that the development of the area known as Greater Vancouver should be along lines shown in the plan of general development of such area, prepared a year ago.

In general it might be noted that any development along the west coast line in the vicinity of the Fraser River will have to contend with silt deposits. Mr. C. C. Worfold, already quoted, is authority for the statement that the sand heads at the mouth of the North Arm of the Fraser River have been rapidly extending and the low water ten (10) foot contour has moved out 2500 feet in the last eight years.

Spanish Bank is undoubtedly a result of such deposits and this factor will have to be considered. In other words, the establishment of a port in this vicinity would not necessarily eliminate the expense of dredging.

Romance L. Seymour.



No 82.

PLAN OF
FORESHORE AT POINT GREY, B.C.

APPLIED FOR BY
VANCOUVER TERMINALS CO.

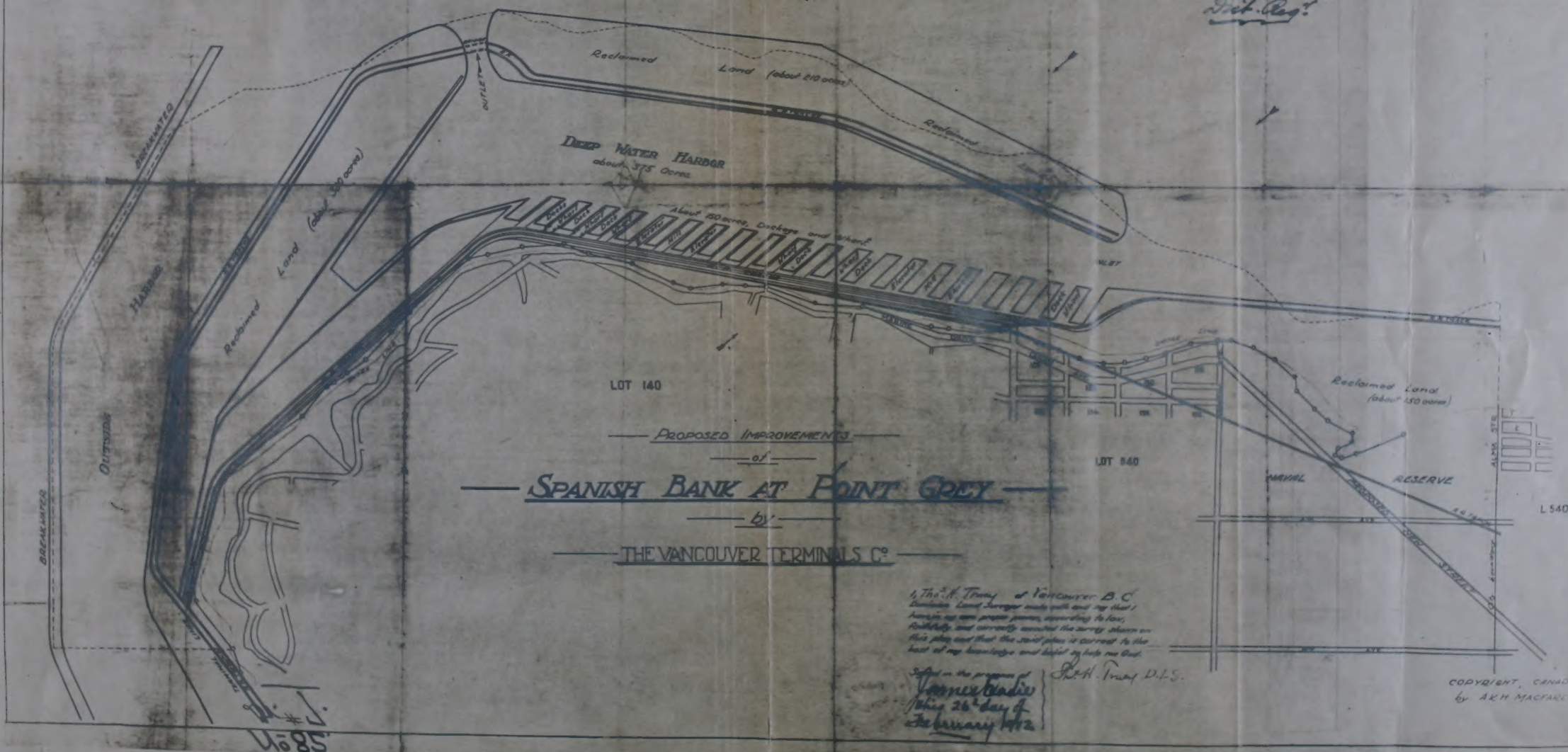
Scale 1" = 200 yds

Deposited by Vancouver Terminals Co., (per A.H.H. McFarlane)
 the 28th day of February 1912.

422 Richards St.

Arthur J. Smith

Dist. Reg.



No 82.

PLAN OF

FORESHORE AT POINT GREY. B.C.

APPLIED FOR BY

VANCOUVER TERMINALS CO.

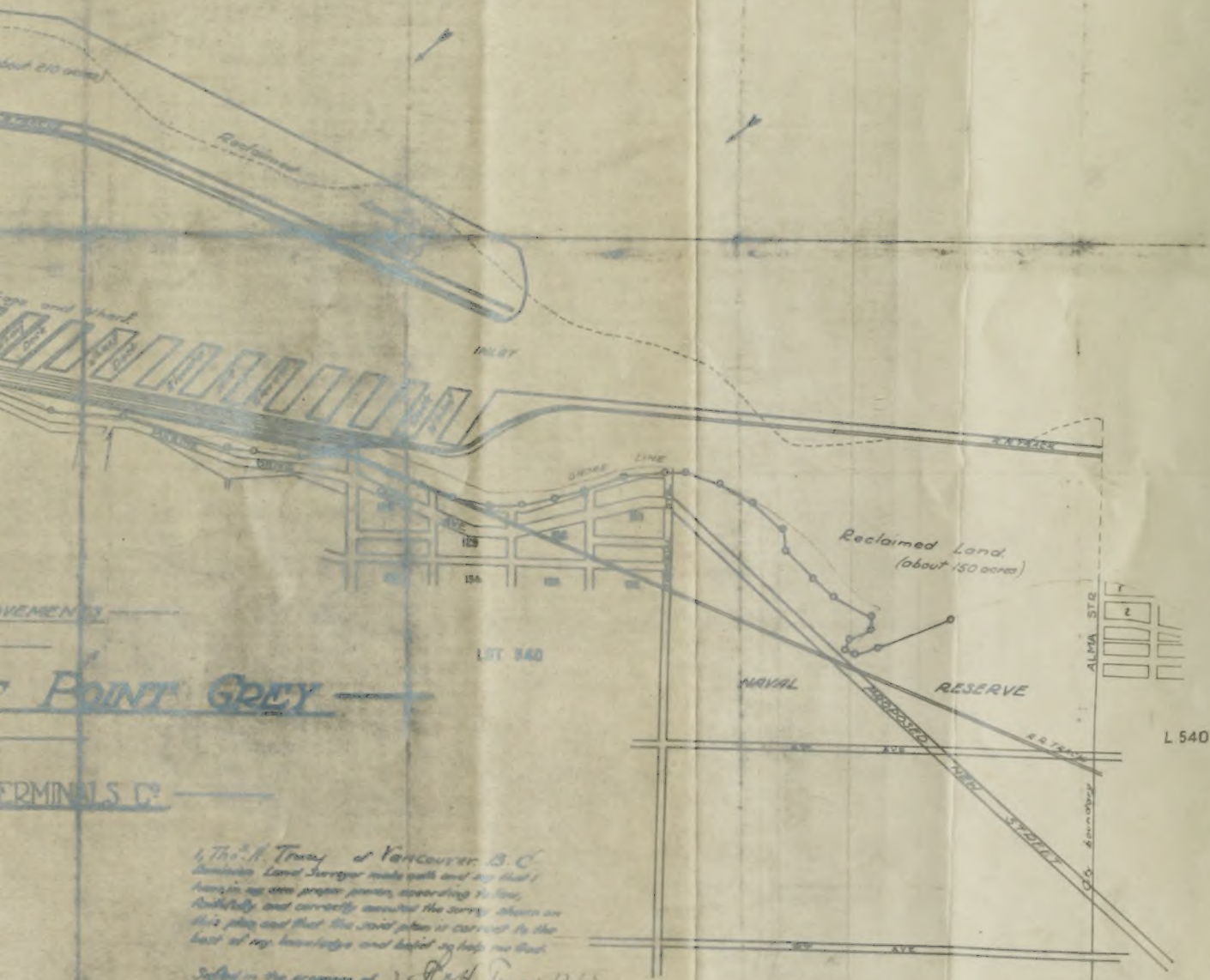
Scale 1" = 12 chns.

Deposited by Vancouver Terminals Co., (per A.H.K. MacFarlane)
the 25th day of February 1912.

422 Richards St.

Attest my hand

Dist. Reg.



I, The H. Tracy of Vancouver B.C.
Assistant Land Surveyor make oath and say that I
have in my own proper person, according to law,
faithfully and correctly executed the survey shown on
this plan and that the said plan is correct to the
best of my knowledge and belief and help me that

Signed in the presence of
James MacFarlane
this 26th day of
February 1912

H. H. Tracy D.L.S.

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